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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Dennis L. Matthies

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EXAMINER

RAABE, CHRISTOPHER M

ART UNIT

PAPER NUMBER

2879

MAIL DATE

DELIVERY MODE

06/05/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/904,269

Applicant(s)

MATTHIES, DENNIS L.

Examiner

Christopher M. Raabe

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 January 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 4-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

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DETAILED ACTION

1. In view of the Appeal filed on January 4, 2007, PROSECUTION IS HEREBY REOPENED. New grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

2. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. Claims 1,2,4-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura et al. (USPN 20010033894) in view of Wu et al. (USPN 5634835).

With regard to claim 1,

Nakamura et al. disclose at least in figures 2a, 2b, 9, 14a and 14b a method comprising: temporarily flattening a sheet (1, 216) by applying a flattening force (via chuck 2, 234) to the center of said sheet (1,216); applying films (5,6) to said sheet while said sheet (1) is held in a flattened configuration; and securing said sheet (1) to a second sheet (10,30) while continuing to hold the center of said sheet (1,216) in a flattened configuration (via chuck 2,234).

Nakamura et al. do not disclose the films to be row and column electrodes.

Wu et al. do disclose in column 9, lines 55-60 forming on a substrate films that are row and column electrodes, allowing for effective control of device emission.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the method of Nakamura et al. with that of Wu et al. in order to effectively control emission.

With regard to claim 2,

Nakamura et al. disclose the method of claim 1, wherein temporarily flattening the sheet (1,216) includes placing the sheet (1,216) in a vacuum chuck (2,234) and applying a vacuum (via 2,234), flattening the sheet.

With regard to claim 4,

Nakamura et al. disclose the method of claim 1.

Nakamura et al. do not disclose applying light emitting material to said sheet.

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Wu et al. do disclose in column 9, lines 55-60 wherein processing of said sheet includes applying light emitting material to said sheet, providing effective display emission.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the method of Wu et al. with that of Nakamura et al. in order to provide effective display emission.

With regard to claim 5,

Nakamura et al. disclose the method of claim 4.

Nakamura et al. do not disclose applying light emitting material to said sheet.

Wu et al. (see the rejection of claim 4) do disclose applying light emitting material to said sheet between said row and column electrodes, but not wherein applying a light emitting material to said sheet includes applying an organic light emitting material. However it was well known to those of ordinary skill in the art at the time of the invention to utilize organic light emitting materials in order to reduce method cost.

With regard to claim 6,

Nakamura et al. disclose the method of claim 1, further including processing said second sheet (10,30) in a flattened configuration (via 202,322,321).

With regard to claim 7,

Nakamura et al. disclose the method of claim 6 including processing said second sheet (10,30) in a chuck (202,322,321).

With regard to claim 8,

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Nakamura et al. disclose the method of claim 7 including processing both said first (1,216) and second (10,30) sheets in chucks (2,202,234,322,321) and combining said sheets (1,216,10,30) using said chucks (2,202,234,322,321).

With regard to claim 9,

Nakamura et al. disclose the method of claim 1.

Nakamura et al. do not disclose securing said first and second sheets to an integrator plate. However integrator plates were well known to and widely used by those of ordinary skill in the art at the time of the invention to provide a fixed distance between front and back panels of a display device, and hence would have been obvious to incorporate into the method of Nakamura et al.

With regard to claim 10,

Nakamura et al. disclose the method of claim 9 including surface mounting said first (1,216) and second sheets (10,30).

With regard to claim 11,

Nakamura et al. disclose the method of claim 8 including surface mounting said first (1,216) and second sheets (10,30) in said chucks (2,202,234,322,321).

With regard to claim 12,

Nakamura et al. disclose a method comprising: receiving a warped sheet (1,216); temporarily flattening said sheet (1,216) for processing by applying a force (via 2,234) to the

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center of said sheet (1,216); processing said center-flattened, warped sheet (1,216) by applying films (5,6); and securing said center-flattened warped sheet (1,216) to a planar surface (10,30).

Nakamura et al. do not disclose the films to be electrodes.

Wu et al. do disclose in column 9, lines 55-60 forming on a substrate films that are row and column electrodes, allowing for effective control of device emission.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the method of Nakamura et al. with that of Wu et al. in order to effectively control emission.

With regard to claim 13,

Nakamura et al. disclose the method of claim 12, including securing said flattened sheet (1,216) to a second sheet (10,30) while continuing to hold said flattened sheet (1,216) in a flattened configuration (via 2,234),

With regard to claim 14,

Nakamura et al. disclose the method of claim 12, wherein temporarily flattening the sheet (1,216) includes placing the sheet (1,216) in a vacuum chuck (2,234) and applying a vacuum (via 2,234) to flatten the sheet (1,216).

With regard to claim 15,

Nakamura et al. disclose the method of claim 12.

Nakamura et al. do not disclose securing said flattened sheet to a rigid planar integrating plate. However the use of a rigid planar integrator plate was well known to and widely practiced by those of ordinary skill in the art at the time of the invention to provide a fixed distance

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between front and back panels of a display device, and hence would have been obvious to incorporate into the method of Nakamura et al.

With regard to claim 16,

Nakamura et al. disclose a method comprising: temporarily flattening a sheet (10,30) by applying a force (via 202,322,321) to the center of said sheet (10,30); processing a panel (1,216) while continuing to hold the center of said sheet (10,30) in a flattened configuration (via 202,322,321); and securing said sheet (10,30) to said panel (1,216) while continuing to hold the center of said sheet (10,30) in a flattened configuration (via 202,322,321).

Nakamura et al. do not disclose the processing to include forming row and column electrodes.

Wu et al. do disclose in column 9, lines 55-60 forming on a substrate films that are row and column electrodes, allowing for effective control of device emission.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the method of Nakamura et al. with that of Wu et al. in order to effectively control emission.

Additionally, Nakamura et al. do not disclose the sheet to be made of ceramic, nor the panel to be made of glass. However, the use of a ceramic sheet and glass panel was well known to those of ordinary skill in the art at the time of the invention to provide strong, versatile substrates for display devices, and hence would have been obvious to incorporate into the method of Nakamura et al.

With regard to claim 17,

Nakamura et al. disclose the method of claim 16.

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Nakamura et al. do not disclose securing said sheet and said panel to an integrating plate. However integrator plates were well known to and widely used by those of ordinary skill in the art at the time of the invention to provide a fixed distance between front and back panels of a display device, and hence would have been obvious to incorporate into the method of Nakamura et al.

With regard to claim 18,

Nakamura et al. disclose the method of claim 16, wherein temporarily flattening the sheet (10,30) by placing the sheet in a vacuum chuck (202,322,321) and applying a vacuum (via 202,322,321) to flatten the sheet (10,30).

The obviousness of the use of ceramic material was addressed in the rejection of claim 16.

With regard to claim 19,

Nakamura et al. disclose the method of claim 16.

Nakamura et al. do not disclose wherein processing said panel further includes applying an organic light emitting material between said row and column electrodes.

Wu et al. do disclose in column 9, lines 55-60 wherein processing of said sheet includes applying light emitting material to said sheet, providing effective display emission.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the method of Wu et al. with that of Nakamura et al. in order to provide effective display emission

With regard to claim 20,

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Nakamura et al. disclose the method of claim 16, further including processing both said sheet (10,30) and said panel (1,216) in chucks and combining said sheet (10,30) and said panel (1,216) using said chucks (2,234,202,322,321).


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher M. Raabe whose telephone number is 571-272-8434. The examiner can normally be reached on m-f 7am-3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on 571-272-2457. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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